学位の種類	博士（医学）
報告番号	甲第１６０９号
学位記番号	第１１４４号
氏名	青山　幸平
授与年月日	平成 30 年 3 月 26 日
学位論文の題名	Molecular genetic and clinical delineation of 22 patients with congenital hypogonadotropic hypogonadism. （先天性低ゴナドトロピン性性腺機能低下症の 22 例における分子遺伝学的・臨床的概要） Journal of Pediatric Endocrinology and Metabolism. 2017;30(10):1111-1118.
論文審査担当者	主査：　杉浦 真弓 副査：　安井 孝周，齋藤 伸治

Abstract

Congenital hypogonadotropic hypogonadism (CHH) is classified as Kallmann syndrome (KS) with anosmia/hyposmia or normosmic (n)CHH. Here, we investigated the genetic causes and phenotype-genotype correlations in Japanese patients with CHH. We enrolled 22 Japanese patients with CHH from 21 families (18 patients with KS and 4 with nCHH) and analysed 27 genes implicated in CHH by next-generation and Sanger sequencing. We detected 12 potentially pathogenic mutations in 11 families, with three having a mutation in *ANOS1* (X-linked recessive); three and four having a mutation in *FGFR1* and *CHD7*, respectively (autosomal dominant); and one having two *TACR3* mutations (autosomal recessive). Among four patients with KS carrying a *CHD7* mutation, one had perceptive deafness and two had a cleft lip/palate. The frequency of CHH genes in Japanese was compatible with previous reports, except that *CHD7* mutations might be more common. Furthermore, partial phenotype-genotype correlations were demonstrated in our cohort.